AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A molecular manipulator, comprising:

a light-sensitive compound ~~molecule~~, including a double bond, that changes a *cis-trans* configuration of the double bond in response to illumination by light of a selected wavelength; and

a probe to which the light-sensitive molecule is attached.

2. (Original) The molecular manipulator of claim 1, wherein the probe comprises one of a tip and a line of a scanned-proximity probe microscope.

3. (Original) The molecular manipulator of claim 1, wherein the probe comprises one of silicon, silicon oxide, aluminum oxide, and titanium oxide.

4. (Currently Amended) The molecular manipulator of claim 1, wherein the light-sensitive compound ~~molecule~~ comprises an azo compound.

5. (Currently Amended) The molecular manipulator of claim 1, wherein the light-sensitive compound ~~molecule~~ further includes:

two arms, at least one of the two arms including the double bond; and

a moiety located between the two arms.

6. (Original) The molecular manipulator of claim 5, wherein a first arm of the two arms includes a single azo double bond, and a second arm of the two arms includes other than an azo double bond.

7. (Currently Amended) The molecular manipulator of claim 1, wherein the light-sensitive compound ~~molecule~~ comprises a monoazo compound.

8. (Original) The molecular manipulator of claim 5, wherein each of the two arms includes an azo double bond.

9. (Currently Amended) The molecular manipulator of claim 1, wherein the light-sensitive compound ~~molecule~~ comprises a diazo compound.

10. (Currently Amended) The molecular manipulator of claim 8, wherein each of the two arms includes an azo double bond comprising [[a]] the same *cis-trans* configuration, when illuminated by the light of the selected wavelength.

11. (Original) The molecular manipulator of claim 5, wherein each of the two arms includes a first end, which is bonded to the moiety, and a second end, which includes a functional group, R.

12. (Currently Amended) The molecular manipulator of claim 11, wherein the functional group, R, comprises an element selected from the group consisting ~~one~~ of an alkyl, a haloalkyl, an aryl, an alcohol, an ether, an amine, an aldehyde, a ketone, a carboxylic acid, an ester, and an amide.

13. (Original) The molecular manipulator of claim 5, wherein the moiety includes a functional group, which covalently bonds to the probe.

14. (Currently Amended) The molecular manipulator of claim 13, wherein the functional group comprises an element selected from the group consisting ~~one~~ of a sulfide, a thiol, and an isonitrile.

15. (Original) The molecular manipulator of claim 13, wherein the probe is coated by a coating, to which the functional group of the moiety covalently bonds.

16. (Currently Amended) The molecular manipulator of claim 15, wherein the coating comprises a metal coating including an element selected from the group consisting ~~one~~ of gold, palladium, and platinum.

17. (Original) The molecular manipulator of claim 15, wherein the coating comprises one of trichlorosilane and trialkoxylsilane, and the probe comprises a conductive metal oxide.

18. (Original) The molecular manipulator of claim 5, wherein each of the two arms comprises a different length.

19. (Currently Amended) The molecular manipulator of claim 11, ~~wherein~~ further comprising a space ~~is formed~~ between the two arms that is varied by selecting a functional group, R, for each of the two arms.

20. (Currently Amended - Withdrawn) A method of making a molecular manipulator, comprising:

covalently bonding to a probe, a light-sensitive compound ~~molecule~~, including a double bond, that changes a *cis-trans* configuration of the double bond in response to illumination by light of a selected wavelength.

21. (Currently Amended - Withdrawn) The method of making a molecular manipulator of claim 20, further comprising:

coating the probe with a metal coating to which the light-sensitive compound ~~molecule~~ covalently bonds.

22. (Original) The method of making a molecular manipulator of claim 20, further comprising:

coating the probe with one of trichlorosilane and trialkoxylsilane, wherein the probe comprises a conductive metal oxide.

23. (Currently Amended - Withdrawn) The method of making the molecular manipulator of claim 20, wherein the covalently bonding to a probe occurs at a moiety located between two arms of the light-sensitive compound ~~molecule~~.

24. (Original) The method of making the molecular manipulator of claim 23, wherein a space located between the two arms of the light-sensitive molecule is varied by selecting a functional group, R, for each of the two arms.

25. (Currently Amended - Withdrawn) A method of moving a nanostructure, comprising:

grasping the nanostructure with a light-sensitive compound ~~molecule~~, which is attached to a probe, by illuminating the light-sensitive compound ~~molecule~~ with light of a first wavelength;

moving the nanostructure, which is grasped, to a predetermined position by moving the probe to the predetermined position; and

releasing the nanostructure from the light-sensitive compound ~~molecule~~ by illuminating the light-sensitive compound ~~molecule~~ with light of a second wavelength.

26. (Currently Amended - Withdrawn) The method of moving a nanostructure of claim 25, wherein the grasping the nanostructure comprises changing a double bond from a *trans* configuration to a *cis* configuration within the light-sensitive compound ~~molecule~~.

27. (Original) The method of moving a nanostructure of claim 26, wherein changing a double bond from a *trans* configuration to a *cis* configuration comprises changing an azo double bond from a *trans* configuration to a *cis* configuration

28. (Currently Amended - Withdrawn) The method of moving a nanostructure of claim 25, wherein the releasing the nanostructure comprises changing a double bond from a *cis* configuration to a *trans* configuration within the light-sensitive compound ~~molecule~~.

29. (Original) The method of moving a nanostructure of claim 28, wherein changing a double bond from a *cis* configuration to a *trans* configuration comprises changing an azo double bond from a *cis* configuration to a *trans* configuration

30. (Original) The method of moving a nanostructure of claim 25, further comprising:

moving the probe into a proximate position with the nanostructure by using an atomic force mode of operation of a scanned-proximity probe microscope.